

**Marked-Up Copy**  
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Amendment Filed on: **HEREWITH**

**IN THE CLAIMS**

Please amend the claims as follows.

--1. (Amended) A porous hollow fiber membrane obtained by a method comprising preparing a spinning dope containing microparticles; forming said hollow fiber membrane from said spinning dope according to a dry-wet spinning method or a wet spinning method to obtain a spun hollow fiber membrane; and extracting and removing said microparticles by immersing said spun hollow fiber membrane into an extracting solution;  
wherein said hollow fiber membrane has [having] a permselectivity[, characterized by having]; wherein a particle cutoff is within the range of 1 to 10  $\mu\text{m}$ ; and wherein a pure water permeate flow is equal to or higher than 30,000 L/m<sup>2</sup>/hr/100kPa.

2. (Amended) The porous hollow fiber membrane as [defined] claimed in Claim 1, wherein [the] said particle cutoff is within the range of 2 to 5  $\mu\text{m}$  and [the] said pure water permeate flow is equal to or higher than 100,000 L/m<sup>2</sup>/hr/100 kPa.

3. (Amended) The porous hollow fiber membrane as [defined] claimed in Claim 1, wherein [the] said porous hollow fiber membrane [is made of ] comprises a polysulfone material.

4. (Amended) The porous hollow fiber membrane as [defined] claimed in Claim 3,

wherein [the] said porous hollow fiber membrane [is made of] comprises a polysulfone material [containing ] comprising 1 to 10 wt% of a hydrophilic polymer.

5. (Amended) The porous hollow fiber membrane as [defined] claimed in Claim 4, wherein the hydrophilic polymer is a polyvinylalcohol polymer.

6. (Amended) A method of making a porous hollow fiber membrane, [characterized by] comprising [the steps of]:

forming said hollow fiber membrane according to a dry-wet spinning method or a wet spinning method while using the following components:

a spinning dope containing a base polymer as a material for forming [the] said porous hollow fiber membrane,

an additive [used] for facilitating a phase separation of [the] said spinning dope,

a solvent compatible with both, said [the] base polymer and [the] said additive, and

a mass of microparticles insoluble in [to the compatible] said solvent [and],  
wherein said microparticles are uniformly dispersed in a liquid medium and  
[having] have an average particle size within the range of 1 to 20  $\mu\text{m}$ , and

a coagulating liquid for forming the hollow fiber membrane [is used, forming the hollow fiber membrane according to a dry-wet spinning method or a wet spinning method;],

to obtain a spun hollow fiber membrane; and

extracting and removing [the] said microparticles by immersing [the hollow fiber membrane, which has been spun,] said spun hollow fiber membrane into an extracting solution effective to dissolve [the] said microparticles, but ineffective to dissolve [the] said

base polymer.

7. (Amended) The method of making the porous hollow fiber membrane as [defined] claimed in Claim 6, wherein the spinning dope is used in the form of a uniform spinning dope of a composition in which when only the base polymer, the additive and the solvent compatible to both the base polymer and the additive are dissolved, phase separation takes place, but addition of the microparticles suppresses the phase separation to enable spinning of the hollow fiber membrane.

8. (Amended) The method of making the porous hollow fiber membrane as [defined] claimed in Claim 6, wherein [the] said microparticles[ are microparticles of] comprise silicon oxide.

9. (Amended) The method of making the porous hollow fiber membrane as [defined] claimed in Claim 6, wherein [the] said coagulating liquid for forming the hollow fiber membrane is a solution [containing ] comprising 1 to 10 wt% of a polyvinyl alcohol.

10. (Amended) A porous hollow fiber membrane module which comprises:  
a plurality of porous hollow fiber membranes [each manufactured as set forth] as claimed in Claim 1, each of the porous hollow fiber membranes having an effective length not greater than 50 cm, each or a block of the porous hollow fiber membranes being sealed at one end thereof;

a housing;

a protective casing; and

a bonding resin block accommodated within the housing and positioned at a lower end region of the housing while an end sealing region is positioned in an upper region of the housing when the module is in use.

11. (Amended) A method of using porous the hollow fiber [membranes] membrane

[manufactured] as [set forth] claimed in Claim 1 for preparing a purified water, [which method comprises] comprising:

[a step of] filtering an untreated water from a water source through [the] said porous hollow fiber [membranes] membrane.

12. (Amended) A method of using [a] the porous hollow fiber membrane module [manufactured] as [set forth] claimed in Claim 10 for preparing a purified water, [which method comprises] comprising:

[a step of] filtering an untreated water from a water source through [the] said porous hollow fiber membrane module.

13. (Amended) A method of using the porous hollow fiber [membranes] membrane [manufactured] as [set forth] claimed in Claim 1 for preparing a purified water, [which method comprises] comprising:

[a step of] coagulating an untreated water from a water source with a coagulating agent; and

[a step of] subsequently filtering the water through [the] said porous hollow fiber [membranes] membrane.

14. (Amended) A method of using [a] the porous hollow fiber membrane module [manufactured] as [set forth] claimed in Claim 10 for preparing a purified water, [which method comprises] comprising:

[a step of] coagulating an untreated water from a water source with a coagulating agent; and

[a step of] subsequently filtering the water through [the] said porous hollow fiber membrane module.

15. (Amended) A method of using the porous hollow fiber [membranes] membrane

[manufactured] as [set forth] claimed in Claim 1 for preparing a purified water, [which method comprises] comprising:

[a step of] coagulating an untreated water from a water source with a coagulating agent[,];[and ]

[a step of] subsequently subjecting the water to a sedimentation or a pressurized floatation treatment to separate suspended particles from the water[,]; and

[a step of finally] filtering the water, from which the suspended particles have been separated, through [the] said porous hollow fiber [membranes] membrane.

16. (Amended) A method of using [a] the porous hollow fiber membrane module [manufactured] as [set forth] claimed in Claim 10 for preparing a purified water,[which method comprises] comprising:

[a step of] coagulating an untreated water from a water source with a coagulating agent[,];

[a step of] subsequently subjecting the water to a sedimentation or a pressurized floatation treatment to separate suspended particles from the water[,]; and

[a step of finally] filtering the water, from which the suspended particles have been separated, through [the] said porous hollow fiber membrane module.

17. (Amended) A method of using porous hollow fiber [membranes] membrane [manufactured] as [set forth] claimed in Claim 1 for preparing a purified water, [which method comprises] comprising:

[a step of] coagulating an untreated water from a water source with a coagulating agent[,];

[a step of] subsequently subjecting the water to a sedimentation or a pressurized floatation treatment to separate suspended particles from the water[,];

[a step of finally] filtering the water, from which the suspended particles have been separated, through a sand filter, to obtain a sand-filtered water; and

[a step of ]filtering the sand-filtered water through the porous hollow fiber [membranes] membrane.

18. (Amended) A method of using [a] the porous hollow fiber membrane module [manufactured] as [set forth] claimed in Claim 10 for preparing a purified water,[which method comprises] comprising:

[a step of] coagulating an untreated water from a water source with a coagulating agent[,];

[a step of] subsequently subjecting the water to a sedimentation or a pressurized floatation treatment to separate suspended particles from the water[,];

[a step of ]filtering the water, from which the suspended particles have been separated, through a sand filter, to obtain a sand-filtered water; and

[a step of finally] filtering the sand-filtered water through the porous hollow fiber membrane module.

19. (Amended) A method of using porous hollow fiber [membranes] membrane [manufactured] as [set forth] claimed in Claim 1 for preparing a purified water, [which method comprises] comprising:

[a step of] filtering an untreated water from a water source through a sand filter to obtain a sand-filtered water; and

[a step of] subsequently filtering the sand-filtered water through the porous hollow fiber [membranes] membrane.

20. (Amended) A method of using [a] the porous hollow fiber membrane module [manufactured] as [set forth] claimed in Claim 10 for preparing a purified water,[which

method comprises] comprising:

[a step of] filtering an untreated water from a water source through a sand filter to obtain a sand-filtered water; and

[a step of] subsequently filtering the sand-filtered water through the porous hollow fiber membrane module.

21. (Amended) A method of using porous hollow fiber [membranes] membrane [manufactured] as [set forth] claimed in Claim 1 for preparing a purified water, [which method comprises] comprising:

[a step of] coagulating an untreated water from a water source[,];

[a step of] subsequently filtering the treated water through a sand filter to obtain a sand-filtered water[:], and

[a step of] filtering the sand-filtered water through the porous hollow fiber [membranes] membrane.

22. (Amended) A method of using [a] the porous hollow fiber membrane module [manufactured] as [set forth] claimed in Claim 10 for preparing a purified water, [which method comprises] comprising:

[a step of] coagulating an untreated water from a water source[:],

[a step of] subsequently filtering the treated water through a sand filter to obtain a sand-filtered water[:], and

[a step of] filtering the sand-filtered water through the porous hollow fiber [membranes] membrane module.

23. (Amended) A method of using the porous hollow fiber membranes as [described] claimed in Claim 1 for preparing a purified water, [which method further comprises] comprising:

[a step of] subjecting the water to at least one treatment selected from the group consisting of ozone treatment, activated carbon treatment and chlorine treatment, either before or after the filtration through the porous hollow fiber [membranes] membrane.

24. (Amended) A method of using [a ] the porous hollow fiber membrane module as [described] claimed in Claim 10 for preparing a purified water,[which method further comprises] comprising:

[a step of] subjecting the water to at least one treatment selected from the group consisting of ozone treatment, activated carbon treatment and chlorine treatment, either before or after the filtration through the porous hollow fiber membrane module.

25. (Amended) [A] The method of using the porous hollow fiber [membranes] membrane [manufactured] as [set forth] claimed in Claim 11, wherein the purified water is prepared by backwashing separation membranes at intervals of a predetermined time [with use of] using a gaseous medium.

26. (Amended) [A] The method of using a porous hollow fiber membrane module [manufactured] as [set forth] claimed in Claim 12, wherein the purified water is prepared by backwashing separation membranes at intervals of a predetermined time [with use of] using a gaseous medium.

27. (Amended) [A] The method of using porous hollow fiber [membranes] membrane [manufactured] as [set forth] claimed in Claim 11, wherein the purified water is prepared by backwashing separation membranes at intervals of a predetermined time [with use of] using a hot water of a temperature not lower than 60 °C.

28. (Amended) [A] The method of using a porous hollow fiber membrane module [manufactured] as [set forth] claimed in Claim 12, wherein the purified water is prepared by backwashing separation membranes at intervals of a predetermined time [with use of] using



a hot water of a temperature not lower than 60 °C.--

Claims 29 and 30. (New)